WO 2005/018703 PCT/US2004/026109

What is claimed is:

1. A device for delivering a medicament into the body of a patient by injection into or through the skin of a patient, comprising:

a housing having a bottom surface adapted to contact the skin of a patient, a needle aperture on said bottom surface and a top surface;

an injection needle adapted for penetration of tissue and for movement through the needle aperture;

a reservoir, disposed within said housing, said reservoir in fluid communication to the injection needle;

a pressurization system for pressurizing the reservoir;

a shielding member adapted for movement away from the bottom surface, the shielding member having a covering portion disposed about the needle aperture, and at least one stanchion protruding from the covering portion, the shielding member having a first position wherein the stanchion of the shielding member is initially disposed within the housing and the covering portion is substantially co-planar with the bottom surface of the housing, and a second position wherein the stanchion of the shielding member is partially withdrawn from the housing and the covering portion at least partially covers the needle;

a biasing element disposed within the housing adapted to contact the shielding member and bias the shielding member towards the second position of the shielding member; and

a movable interposer having a first position, which prevents movement of the shielding member, and a second position, which allows movement of the shielding member;

wherein when the device is placed upon the skin of the patient and activated, the interposer is moved from a first position to a second position and the biasing element is allowed to bias the shielding member into the second position, thereby, as the device is removed from the skin, the shielding member emerges from the housing and at least partially covers the needle.

2. A device for delivering a medicament into the body of a patient by injection into or through the skin of a patient, comprising:

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a housing having a bottom surface adapted to contact the skin of a patient, a needle aperture on said bottom surface and a top surface;

an injection needle adapted for penetration of tissue and for movement through the needle aperture;

a reservoir, disposed within said housing, said reservoir in fluid communication to the injection needle;

a pressurization system for pressurizing the reservoir; and

a shielding member adapted for movement substantially perpendicular to the bottom surface, the shielding member having a skin contacting portion disposed about the needle aperture and is substantially covered with adhesive, and at least one stanchion protruding from the skin contacting portion, the shielding member having a first position wherein the stanchion of the shielding member is initially disposed within the housing and the skin contacting portion is substantially co-planar with the bottom surface of the housing, and a second position wherein the stanchion of the shielding member is partially withdrawn from the housing and the shielding member at least partially covers the needle;

wherein when the device is placed upon the skin of the patient, the skin contacting portion of the shielding member is temporarily adhered to the skin and when the device is removed from the skin, the adhesion of the shielding member to the skin is sufficient to move the shielding member from the first position to the second position.

3. A device for delivering a medicament into the body of a patient by injection into or through the skin of a patient, comprising:

a housing having a bottom surface, a needle aperture on said bottom surface and a top surface;

an injection needle adapted for penetration of tissue and for movement through the needle aperture;

a reservoir, disposed within said housing, said reservoir in fluid communication to the injection needle;

a pressurization system for pressurizing the reservoir; and

a shielding member adapted for rotational movement along an arcuate path substantially perpendicular to the bottom surface, the shielding member having a skin contacting portion disposed about the needle aperture and is substantially covered with WO 2005/018703 PCT/US2004/026109

adhesive, and a pivot, the shielding member having a first position wherein shielding member is substantially co-planar with the bottom surface of the housing, and a second position wherein the shielding member is rotated about the pivot and the shielding member at least partially covers the needle;

wherein when the device is placed upon the skin of the patient, the skin contacting portion of the shielding member is temporarily adhered to the skin and when the device is removed from the skin, the adhesion of the shielding member to the skin is sufficient to rotate the shielding member about the pivot from the first position to the second position.

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